

## IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (currently amended) A method for protecting an input buffer, comprising the operations of:

lowering a current from a p-supply to an input buffer when an input voltage to the input buffer is tolerant HIGH, wherein the p-supply is a voltage supplied to a p-channel transistor in the input buffer; and

setting the p-supply to a particular voltage using a p-supply p-channel transistor when the input voltage to the input buffer is tolerant HIGH, the p-supply p-channel transistor turning OFF when the input to the input buffer is tolerant HIGH and the p-supply voltage has an internal voltage of a Ring I/O-  $V_{Th}$ , and wherein the p-supply p-channel transistor turns ON and the p-supply voltage has an internal voltage of a Ring I/O when the input to the input buffer is LOW, the particular voltage being at a specific value such that input transistors within the input buffer do not experience overstress voltages.

2. (original) A method as recited in claim 1, wherein overstress voltages are voltages having values higher than an internal voltage of a Ring I/O wherein the input buffer is located.

3. (original) A method as recited in claim 1, wherein p-supply is prevented from supplying current to the input buffer when an input voltage to the input buffer is tolerant HIGH.

4. - 6. (Cancelled)

7. (currently amended) A method as recited in claim 1, ~~further comprising the operation of using a generator to design~~ wherein the voltage tolerant input buffer is implemented utilizing an I/O generator.

8. (currently amended) A voltage tolerant circuit for protecting an input buffer, comprising:

an n-channel pass gate transistor having a first terminal coupled to a pad I/O, a second terminal coupled to an input of an input buffer, and a gate coupled to an internal ring voltage (Ring V<sub>DD</sub>); and

a p-supply p-channel transistor having a gate coupled to the pad I/O, a first terminal coupled to Ring V<sub>DD</sub>, and a second terminal coupled to a p-supply of the input buffer, wherein the p-supply is a voltage supplied to a p-channel transistor in the input buffer; and

a p-channel transistor having a first terminal coupled the pad I/O, a gate coupled to Ring V<sub>DD</sub>, and a second terminal coupled to a first terminal of an n-channel transistor.

9. (Cancelled)

10. (currently amended) A voltage tolerant circuit as recited in claim 9 8,  
wherein the n-channel transistor further includes a gate coupled to Ring V<sub>DD</sub> and a  
second terminal coupled to the p-supply of the input buffer.

11. (original) A voltage tolerant circuit as recited in claim 8, wherein the input  
buffer is an inverter.

12. (original) A voltage tolerant circuit as recited in claim 11, wherein the  
inverter includes a p-channel transistor having a first terminal coupled to the p-supply  
of the input buffer, a gate coupled to the input of the input buffer, and a second  
terminal coupled to an output of the input buffer.

13. (original) A voltage tolerant circuit as recited in claim 12, wherein the  
inverter further includes an n-channel transistor having a first terminal coupled to the  
output of the input buffer, a gate coupled to the input of the input buffer, and a second  
terminal coupled to ground.

14. (original) A voltage tolerant circuit as recited in claim 8, wherein the  
voltage tolerant I/O is implemented utilizing an I/O generator designed using a  
generator.

15. (currently amended) A voltage tolerant architecture, comprising:  
an input buffer having an input, an output, and a p-supply, wherein the p-  
supply is a voltage supplied to a p-channel transistor in the input buffer; and

a voltage tolerant I/O circuit having an n-channel pass gate transistor having a first terminal coupled to a pad I/O and a second terminal coupled to an input of an input buffer, and a p-supply p-channel transistor having a gate coupled to the pad I/O, a first terminal coupled to Ring  $V_{DD}$ , and a second terminal coupled to the p-supply of the input buffer, the voltage tolerant I/O circuit further comprising a a p-channel transistor having a first terminal coupled to the pad I/O, a gate coupled to Ring  $V_{DD}$ , and a second terminal coupled to a first terminal of an n-channel transistor.

16. (Cancelled)

17. (currently amended) A voltage tolerant architecture as recited in claim 16 15, wherein the n-channel transistor further includes a gate coupled to Ring  $V_{DD}$  and a second terminal coupled to the p-supply of the input buffer.

18. (original) A voltage tolerant architecture as recited in claim 15, wherein the input buffer is an inverter.

19. (original) A voltage tolerant architecture as recited in claim 18, wherein the inverter includes a p-channel transistor having a first terminal coupled to the p-supply of the input buffer, a gate coupled to the input of the input buffer, and a second terminal coupled to an output of the input buffer.

20. (currently amended) A voltage tolerant architecture as recited in claim 15, wherein the voltage tolerant I/O circuit is designed using a generator implemented utilizing an I/O generator.